

What is claimed is:

1. A composition for transdermal delivery of an active agent in a flexible, finite system comprising a blend of:

a therapeutically effective amount of one or more active agents;

a pharmaceutically acceptable carrier; and

a rosin ester in an amount up to 25% by weight of the total composition, said amount being sufficient to suppress crystal formation of the one or more active agents during storage of the system,

wherein the composition excludes 1-menthol and is capable of delivering a therapeutically effective amount of the one or more active agents at a substantially zero-order kinetic rate of delivery to the skin or mucosa of a patient in need thereof over a period in excess of 24 hours.

2. The composition according to claim 1, wherein the rosin ester is selected from the group consisting of pentaerythritol esters of hydrogenated wood rosin, glycerol esters of hydrogenated wood rosin, pentaerythritol esters of partially hydrogenated wood rosin, pentaerythritol esters of wood rosin, pentaerythritol esters of modified wood rosin, glycerol esters of partially hydrogenated wood rosin, triethylene glycol esters of hydrogenated rosin, glycerol esters of partially dimerized rosin, pentaerythritol esters of tall oil rosin, glycerol esters of tall oil rosin, pentaerythritol esters of dimerized rosin, pentaerythritol esters of partially dimerized rosin, and combinations and mixtures thereof.

3. The composition according to claim 2, wherein the rosin ester is a pentaerythritol ester.

4. The composition according to claim 3, wherein the pentaerythritol ester is an ester of a non-hydrogenated wood rosin.

5. The composition according to claim 2, wherein the pharmaceutically acceptable carrier is a pressure-sensitive adhesive.

6. The composition according to claim 5, wherein the pressure-sensitive adhesive carrier includes a non-hydroxy functional polyacrylate polymer.

7. The composition according to claim 6, further comprising a polyvinylpyrrolidone and an enhancer, and the active agent is an androgen selected from the group consisting of testosterone and methyltestosterone.

8. The composition according to claim 1, wherein the one or more active agents is selected from the group consisting of hormonal and steroidal active agents.

9. A composition for transdermal delivery of an active agent in a flexible, finite system comprising a blend of:

a therapeutically effective amount of one or more active agents;

a pharmaceutically acceptable pressure-sensitive adhesive carrier comprising a polyacrylate in an amount of about 15% to about 35% by weight of the total composition and a polysiloxane in an amount of about 35%

to about 55% by weight of the total composition; and

a rosin ester in an amount up to 25% by weight of the total composition, said amount being sufficient to suppress crystal formation of the one or more active agents during storage of the system,

wherein the composition excludes 1-menthol and is capable of delivering a therapeutically effective amount of the one or more active agents at a substantially zero-order kinetic rate of delivery to the skin or mucosa of a patient in need thereof over a period of at least 72 hours.

10. The composition according to claim 9, wherein the rosin ester is selected from the group consisting of pentaerythritol esters of hydrogenated wood rosin, glycerol esters of hydrogenated wood rosin, pentaerythritol esters of partially hydrogenated wood rosin, pentaerythritol esters of wood rosin, pentaerythritol esters of modified wood rosin, glycerol esters of partially hydrogenated wood rosin, triethylene glycol esters of hydrogenated rosin, glycerol esters of partially dimerized rosin, pentaerythritol esters of tall oil rosin, glycerol esters of tall oil rosin, pentaerythritol esters of dimerized rosin, pentaerythritol esters of partially dimerized rosin, and combinations and mixtures thereof.

11. The composition according to claim 10, wherein the rosin ester is a pentaerythritol ester.

12. The composition according to claim 11, wherein the pentaerythritol ester is an ester of a non-hydrogenated wood rosin.

13. The composition according to claim 12, wherein the pressure-sensitive adhesive carrier includes a non-hydroxy functional polyacrylate polymer.

14. The composition according to claim 13, further comprising a polyvinylpyrrolidone and an enhancer.

15. The composition according to claim 14, wherein the one or more active agents is selected from the group consisting of hormonal and steroidal active agents.

16. The composition according to claim 15, wherein the steroidal active agent is an androgen selected from the group consisting of boldenone, fluoxymesterone, mestanolone, mesterolone, methandrostenolone, methyltestosterone, norethandrolone, normethandrone, oxandrolone, oxymesterone, oxymetholone, prasterone, stanlolone, stanozolol, testosterone, and tiomesterone.

17. The composition according to claim 16, wherein the androgen is selected from the group consisting of testosterone and methyltestosterone.

18. A method of producing a pressure-sensitive adhesive transdermal drug delivery system suitable for delivering a therapeutically effective amount of the one or more active agents at a substantially zero-order kinetic rate of delivery to the skin or mucosa of a patient in need thereof over a period in excess of 24 hours, comprising the steps of:

producing a blend of:

a therapeutically effective amount of one or more active agents;

one or more pharmaceutically acceptable adhesives;
and

a rosin ester in an amount up to 25% by weight of
the total composition, said amount being sufficient to
suppress crystal formation of the one or more active
agents during storage of the system,

forming the blend into a pressure-sensitive adhesive
carrier composition wherein said composition excludes 1-
menthol, and

drying the pressure-sensitive adhesive carrier to remove
solvents to form the transdermal drug delivery system.